



## **Summary of Fishery Surveys Wood Lake, Taylor County, 2010**

WDNR's Fisheries Management Team from Park Falls completed fyke netting and electrofishing surveys in 2010 to assess the status of important fish populations in Wood Lake. Fyke nets set about 2½ weeks after the spring thaw targeted walleye, northern pike, and yellow perch. A late-spring electrofishing survey documented the abundance and size structure of largemouth bass and bluegill populations. Quality, preferred, and memorable sizes referenced in this summary are based on standard proportions of world record lengths developed for each species by the American Fisheries Society. "Keeper size" is based on known angler behavior.

### **Survey Effort**

On April 15<sup>th</sup>, 2010 we set three fyke nets at locations chosen to intercept early spring spawners and fished them overnight for one night (3 net-nights). With water temperatures at 67°F, our May 19<sup>th</sup> electrofishing survey was well-timed to intercept largemouth bass and bluegill during their peak spawning activities. Wood Lake's shallow boat ramp prevented us from launching our large electrofishing boat that we traditionally use with two dippers. Instead, we used our mini-boom shocker and one dipper to sample the entire shoreline (1.60 mile) in 0.70 hour for gamefish, including 0.52 mile sub-sampled for all species in 0.25 hour.

### **Habitat Characteristics**

Wood Lake is a 62-acre drainage lake located about 7 miles east of Rib Lake, WI. The average depth is 12 feet, and maximum depth is 33 feet. Water color has a moderate brown stain (Secchi depth = 5 feet). The lakebed is 10% sand, 20% gravel, 15% rock and 55% muck and supports a low density of submergent and emergent vegetation. We observed a high amount of woody structure along the shoreline. Taylor County maintains a public boat landing, beach, and campground on the west shore.

### **Summary of Results**

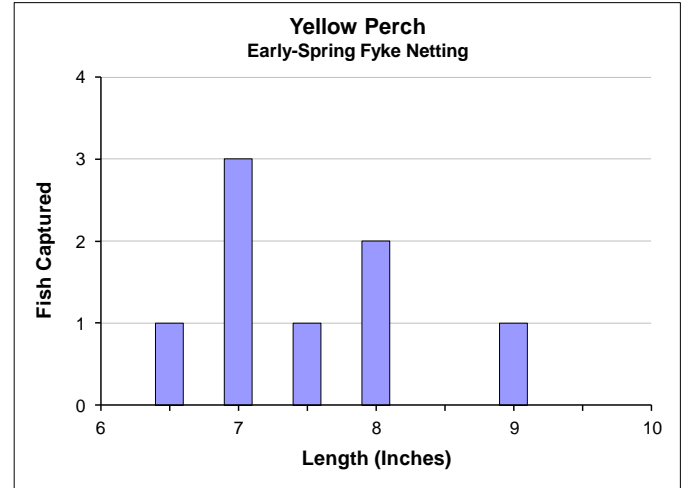
We captured nine fish species in our netting and electrofishing surveys. Largemouth bass was the dominant predator, and bluegills were the most common panfish. We also captured black crappies, yellow perch, a few pumpkinseeds, and one northern pike (30.6 inches). Spring fyke netting yielded 32 white suckers 15.6 – 22.7 inches long whose offspring undoubtedly complements the forage base.

## Yellow Perch



### Early Spring Fyke Nets

Captured 2.7 per net-night $\geq 5"$	
Quality Size $\geq 8"$	38%
Preferred Size $\geq 10"$	0%
Memorable Size $\geq 12"$	0%



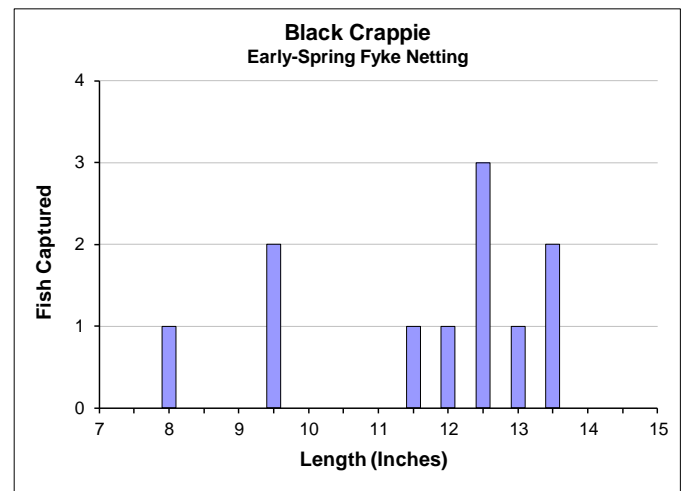
Yellow perch were captured by netting at a rate that indicated low population abundance. Past surveys show that in the early 1990's perch were very abundant, but small in size. Extremely high bass abundance has since lowered the numbers to a very low level. Yellow perch serve as important forage for all gamefish. With the high largemouth bass numbers repressing yellow perch recruitment, perch numbers will not increase in the foreseeable future.

## Black Crappie



### Early Spring Fyke Nets

Captured 3.7 per net-night $\geq 5"$	
Quality Size $\geq 8"$	100%
Preferred Size $\geq 10"$	73%
Memorable Size $\geq 12"$	64%



Black crappie capture rates in early spring fyke nets showed a low abundance with most crappies being of memorable size ( $\geq 12$  inches). Crappies were once abundant with poor size structure, but with the increase in largemouth bass numbers crappie abundance has since declined and their size structure has improved substantially. Age analysis using scales showed crappies were reaching an average of 9.1 inches at age 4 (range 8.2-9.5,  $n=3$ ) and 12.2 inches by age 7 (range 11.8-12.7,  $n=3$ ). Faster than regional average growth rates (8.3 at age 4 and 10.7 at age 7) are a result of low density and low competition. Anglers can expect slow fishing action for crappies in Wood Lake, but they have a chance of catching memorable-size fish.

## Bluegill

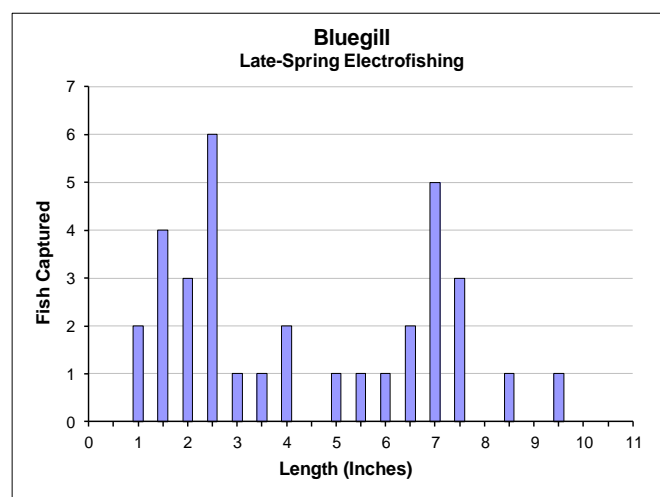
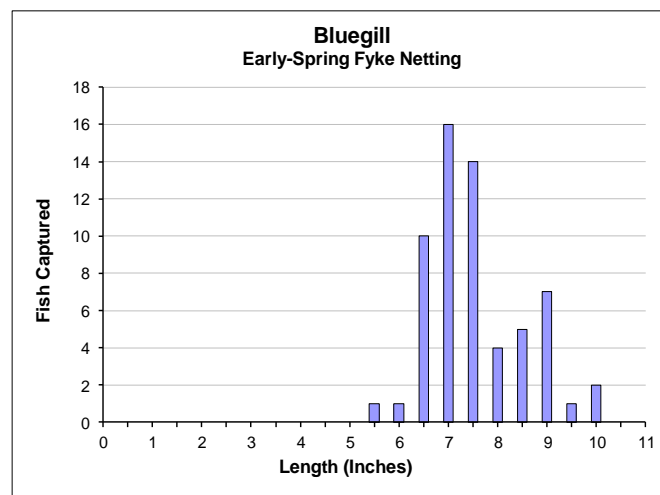


### Early Spring Fyke Nets

Captured 20 per net-night $\geq 3"$	
Quality Size $\geq 6"$	98%
Keeper Size $\geq 7"$	80%
Preferred Size $\geq 8"$	31%

### Late Spring Electrofishing

Captured 37 per mile or 76 per hour $\geq 3"$	
Quality Size $\geq 6"$	68%
Keeper Size $\geq 7"$	53%
Preferred Size $\geq 8"$	11%



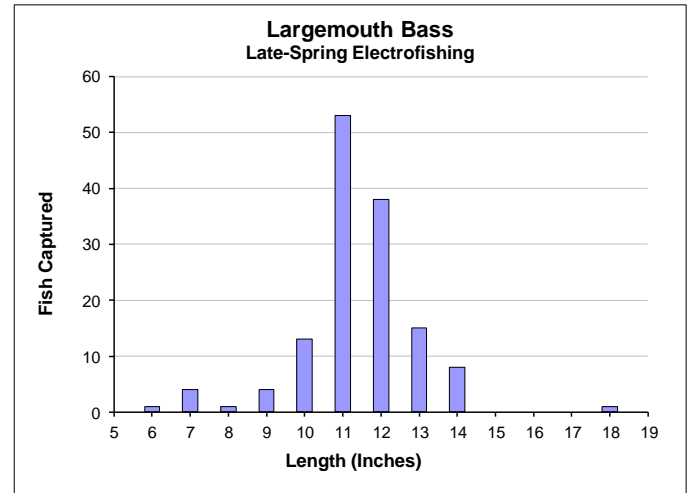
Bluegills were captured at rates that indicate a low to moderate abundance. The overall size structure was very good with a solid proportion of the fish captured by both spring fyke netting and electrofishing attaining preferred size. Age analysis using scales showed a better-than-average growth rate. Wood Lake bluegills were on average 7.1 inches long at age 5 (range 6.8-7.5, n=5), 8.1 inches at age 7 (range 7.6-8.6, n=7), and 9.7 inches at age 10 (range 9.1-10.1, n=4), compared to the regional average lengths of 6.4, 7.5, and 8.9 inches at those ages.

## Largemouth Bass



### Late Spring Electrofishing

Captured 83 per mile or 190 per hour $\geq 8"$	
Quality Size $\geq 12"$	47%
Legal Size $\geq 14"$	7%
Preferred Size $\geq 15"$	0.8%



Largemouth bass were captured by electrofishing at a rate that indicated very high abundance. Size structure was poor. Only 7% of bass 8 inches or longer were of legal size ( $\geq 14$  inches). We suspect that largemouth in Wood Lake are experiencing slow growth and high natural mortality before reaching legal size. In this relatively small lake, largemouth in high abundance appear to be controlling black crappie, bluegill, and yellow perch populations at the low levels of abundance needed for good panfish angling. Anglers can expect a fast-action experience for largemouth bass, but few will be long enough to keep.

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STATE OF WISCONSIN  
DEPARTMENT OF NATURAL RESOURCES

LAKE SURVEY MAP

WOOD LAKE  
TAYLOR COUNTY  
SEC. 23 T. 33 N. R. 3 E.

TAYLOR COUNTY FOREST

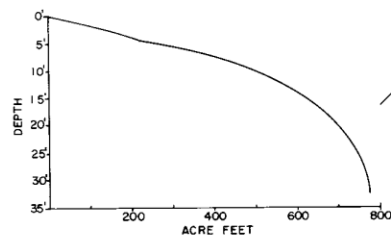
Rib Lake 6 miles

D.N.R. B.M. 'X' 1441-A  
Is A Brass cap set in concrete post  
Located at Boat landing 105' W.  
of waters edge, 99' S. of camp water  
pump in circular turn around  
Assumed elevation 10000'  
Water level 84.58'

Mixed Hardwood & Pine



Mixed Hardwood & Pine



TAYLOR COUNTY FOREST

EQUIPMENT RECORDING SONAR MAPPED JUNE 1969  
MONTH YEAR  
LAKE BOTTOM SYMBOLS

TOPOGRAPHIC SYMBOLS		LAKE BOTTOM SYMBOLS	
(B) Brush	Steep slope	P. Peat	B. Boulders
(PW) Partially wooded	~ Indefinite shoreline	Mk. Muck	Stumps & Snags
(W) Wooded	~ Marsh	C. Clay	Rock danger to navigation
(C) Cleared	~ Spring	M. Marl	T. Submergent vegetation
(P) Pastured	~ Intermittent stream	Sd. Sand	↓ Emergent vegetation
(A) Agricultural	~ Permanent inlet	St. Silt	△ Floating vegetation
B.M. Bench Mark	~ Permanent outlet	Gr. Gravel	~ Brush shelters
■ Dwelling	~ Dam	R. Rubble	
■ Resort	D.N.R. State owned land	Bc Bedrock	
■ Camp			

200' 0' 200' 400' 600' 800'  
SCALE

Access Access with Parking Boat Livery

Drawn by: C. Holt  
Field work by: C. Busch, C. Belter, S. Johannes

SPECIES OF FISH		Abundant	Common	Present
Muskie				X
N. Pike				X
Walleye				X
L. N. Bass				X
S. M. Bass				X
Pontfish				X
Trout				X

WATER AREA 62.5 ACRES  
UNDER 3 FT. 12 %  
OVER 20 FT. 21 %  
MAX. DEPTH 33 FEET.  
TOTAL ALK. 16 P.P.M.  
VOLUME 775.1 ACRE FT.  
SHORELINE 1.43 MILES